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ABSTRACT

A statistical and analytical procedure for selecting states for the purpose of comparing their postsecondary systems with New Jersey's is detailed by a public commission appointed by the New Jersey Board of Higher Education. The approach used factor analysis tc examine information on specific variables that describe the socioeconomic and demographic characteristics, and higher education goals of postsecondary systems in each state and the District of Columbia. In the statistical analysis, weights were applied to the variables and eight prominent factors were determined. A rotation of the factors, and calculation of states most similar to New Jersey on these factors, led to the identification of eight states for which useful comparative information was gathered. The policies of these eight states and New Jersey in 1975-1976 are discussed in terms of similarities and differences in budgeting, governance, and student aid programs. The eight states most comparable to New Jersey were as follows: Connecticut, Maryland, Massachusetts, Michigan, Ohio, Pennsylvania, Rhode Island, and Virginia. Six of the states provided direct subsidies to independent postsecondary institutions, most often for contracted services. Allocations for student aid programs ranged from 2.4 percent to 12.8 percent of the higher education appropriation. Information for each of the nine states is presented on: the type of statewide governance agency, the state's master plan (if any), study commissions, postsecondary goals, the budget submissions process, type of state subsidies to public and private institutions and to students through grant aid, tuition policy and levels, student aid programs, enrollment distributions for all students and student aid recipients, and a ranking of the states on income per capita. (SW)

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INTERSTATE COMPARISONS OF HIGHER EDUCATION SYSTEMS IN NINE STATES

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COMMISSION ON FINANCING POSTSECONDARY EDUCATION
STATE OF NEW JERSEY

A PUBLIC COMMISSION APPOINTED BY THE NEW JERSEY BOARD OF HIGHER EDUCATION

INTERSTATE COMPARISONS
OF HIGHER EDUCATION SYSTEMS
IN NINE STATES

A Study Conducted by the

State of New Jersey

Commission on Financing Postsecondary Education

December, 1976

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Preface

States inevitably look to their neighbors for guidance and precedents when public policies are being debated. This is a natural and frequently beneficial practice since much can be learned from the good and bad experiences of other states. However, the practice of selecting appropriate states for comparisons is far less advanced than are the subsequent analyses of the states' policies.

In postsecondary education, interstate comparisons are increasingly common. Many experts in the field argue that a state can help determine an appropriate course of action by examining adjacent states or by selecting states of similar demographic characteristics for comparisons. While legitimate questions can be raised about the inherent utility of interstate comparisons in any one area because of a multitude of differences on many other variables among the states, a lack of care in selecting states for comparisons will certainly undermine even any tentative conclusions that may be drawn.

The following paper details a statistical and analytical procedure for selecting states for the purpose of comparing their postsecondary systems with New Jersey's. The approach employs factor analysis to examine information on specific variables which describe the socioeconomic and demographic characteristics, and higher education goals of postsecondary systems in each state and the District of Columbia. In the statistical

analysis, weights were applied to the variables and eight prominent factors were determined. A rotation of the factors, and calculation of states most similar to New Jersey on these factors, led to the identification of eight states for which useful comparative information was gathered.

While this technique appears to be a significant step forward in identifying how to select states for comparative analyses several caveats are in order:

- the data employed, although the most recent available, may be in some cases outdated;
- political factors, such as geographic proximity or states containing institutions in which large numbers of New Jersey students enroll, were not considered;
- the relative willingness of states to place a higher priority on postsecondary education than on other social services is not considered in the analysis.

In spite of these concerns the paper that follows sets forth a rational way of determining states for comparison purposes and identifies the eight states New Jersey should consider when conducting interstate comparative analyses in the area of postsecondary education.

The policies of these eight states and New Jersey are displayed and discussed in terms of similarities and differences in budgeting, governance, and student aid programs. This type of comparative analysis is helpful for identifying trends and movements toward change in postsecondary education systems.

Andrew H. Lupton
Executive Director

INTRODUCTION

In his study of statewide planning for higher education, Halstead emphasized the desirability of interstate comparisons to identify strengths and deficiencies in the state system being analyzed, and to determine realistic goals for that system.[1] "A first step in planning is to understand and interpret accurately State environment and needs...A wider perspective...may be obtained, in part, through interstate comparisons; in other words, by establishing one state's position relative to that in other states with similar characteristics."[2] Halstead identified three general units of comparison for grouping states, including basic socio-economic strength to support education, manner of organizing for education and emphasis on various educational priorities.

The procedure for selecting comparable states for the present analysis, as discussed in Part I, is based on these suggestions. The Commission staff identified 25 variables grouped under three areas of comparison:[3] 1) socio-economic characteristics, 2) demography of the state higher education system and 3) tasks, or goals, of that system. These variables were used to perform a factor analysis across 50 states and the District of Columbia. The analysis

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[1] Halstead, K. "Socioeconomic Comparisons Among States." (Chapter II) in Statewide Planning in Higher Education. Washington, D.C.: Department of Health, Education and Welfare, 1974.

[2] Ibid. (p. 45).

[3] These variables are listed in Table 1.

resulted in the identification of eight primary factors (identified as support, demand, resources, etc.), which consist of weighted combinations of 18 of the variables. All states were ranked in relation to New Jersey on each factor, and that group of states most similar to New Jersey over all factors was selected for comparison purposes.

Once the eight comparable states were determined, the higher education system in each state was examined to identify patterns of governance and financing.

The first section of Part II contains six tables, in which highly detailed information about financing and governance policies in each state is displayed. The information in these tables, particularly in the first two, was solicited during telephone interviews with representatives from the central office staff of each state's higher education board, council or commission. Other sources of information are cited below the tables.

In the second section of Part II, the governance structures, goals and financing priorities of each comparable state are discussed. Information for these brief sketches was gathered primarily from higher education "Master Plans" and other relevant documents published by the states.[4]

Summary of Findings

Although governance policies vary from highly regulatory control to broad coordination at the state level, financing patterns among the states

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[4] All documents reviewed for this report are listed under "References."

are quite similar. The largest proportion of each state's higher education appropriation is allocated to the public postsecondary institutions. These institutional subsidies range from 86.2% to 96.0% of the budgets, except in Pennsylvania, where less than 70.0% is allocated directly to institutions. (A portion of Pennsylvania's large administrative budget is also used for institutional support.)

Six of the comparable states provide direct subsidies to independent postsecondary institutions, most often for contracted services. From 5% to 7% of the higher education budget is used for this purpose and for allocations to independent medical and dental schools in some states.

Student aid programs are funded in all of the comparable states; the allocations range from 2.4% to 12.8% of the higher education appropriation and about 5% of enrolled postsecondary students are awarded state funded grants in each state. Pennsylvania and New Jersey lead the comparable states in proportion of students who receive aid, i.e., 25.2% and 16.8%, respectively. (These two states are among the top five in the country in amount of student aid funds awarded.)

Although the data is presented for comparative purposes, the reader should be cautioned against deriving conclusions from a comparison of one item without consideration for other related factors which may influence that item. For example, the amount of the average student aid grant awarded in one state may be determined by its public sector tuitions, the number of low-income students enrolled, and other factors. The difference between the average grant award in each of two states cannot be viewed as an absolute dollar difference; all other factors would have to be held constant in order to justify a one-to-one comparison.

Part I

PROCEDURE FOR IDENTIFYING COMPARABLE STATES

Information about 25 variables was gathered for each of the 50 states and the District of Columbia for the years 1969 and 1970.[5] The variables, which are listed in Table 1, were utilized in a standard factor analysis package found in the "Statistical Package for Social Sciences" program.[6] The mean and standard deviation for each variable are shown in Table 2. After a principal components factor analysis was conducted, those factors with a computed Eigenvalue[7] of over 1.00 were selected for use in the comparison study; the eight factors selected accounted for 88.1% of the variance among the data.

The weight of each variable in each of the selected factors is shown in a Varimax rotated factor matrix (Table 3), which forces each factor to be independent of every other factor. Variables with the largest weights, either positive or negative, were isolated as the primary, or loading variables constituting a particular factor; the scores of these weighted variables are outlined in Table 3. The eight factors and the loading variables for each factor are listed in Table 4.

For each factor, each of 25 variable weights was multiplied by a state's Z score for that variable; the sum of these 25 multiplications became the factor "score" for that state. For example, the weight of variable 1 in Factor 1, -0.28934 (Table 3), was multiplied by Alabama's Z score for variable 1.

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5 See Table II-1, pp. 70-90, in Halstead's book, and U.S. Census data, 1970. The raw data is listed in Appendix A.

6 See Nie, N., et al. SPSS: Statistical Package for the Social Sciences (Second Edition). New York: McGraw-Hill, Inc., 1975.

7 An Eigenvalue is a special measure computed in the process of deriving the discriminant function, and indicates the relative importance of the function. Sum of the eigenvalues is a measure of total variance in the variables. See Nie, Op Cit., p. 442.

The weight of variable 2 was multiplied by Alabama's Z score for variable 2, and so on through variable 25. The sum of these computations is the factor score for Alabama on Factor 1. Eight factor scores for each state are displayed in Table 5.

The procedure up to this point has been considered a common method for alleviating redundancy within a set of data. Once the primary factors were selected and a factor score was calculated for each state for each of eight factors, it was necessary to develop a method for combining factors in order to compare each state to New Jersey over all factors. The factors had previously been rotated to insure independence, with the result that each factor could be visualized as perpendicular to every other factor. In effect, the factors define an eight dimensional space. Along each of eight dimensions, each state is plotted relative to all other states.

New Jersey was made the center of this space and a unique point was located for every other state in the space. The difference in distance between any two points and the center represented the relative "nearness" of those points (states) to the center (New Jersey).

Calculation of these distances was made with the factor scores listed in Table 5. The difference between the factor score for a particular state and New Jersey's factor score was computed for each of the eight factors. These differences were squared and summed. The square root of the total represents the distance from a state to New Jersey.[8] Through this method, the relative distance of each state from New Jersy was ranked in the eight dimensional space. The results of these calculations are shown in Table 6.

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[8] The formula for distance is:

$$\text{distance} = \sqrt{\sum_{n=1}^{8} (S_1 - NJ)_n^2}$$

where S_1 is a state's factor score and NJ is New Jersey's score.

A close look at the distance of each state from New Jersey in Table 6 indicates that a cut-off point for selecting comparable states is not immediately evident. However, the first eight states in Table 6, not including New Jersey, cluster fairly well together; their combined distance is .5 units from the first to the eighth, and distances increase in greater amounts with the ninth state. The first eight ranked states were therefore selected at what appeared to be a rational cut-off point, on the basis of their calculated distances from New Jersey. These states are: Connecticut, Maryland, Massachusetts, Michigan, Ohio, Pennsylvania, Rhode Island and Virginia.

Table 1

Descriptions for Variables used in Factor Analysis[a]

Variable #	Description
1	Percent of state population residing in standard metropolitan statistical areas (SMSA's) (1970)
2	Percent of families in low income bracket (1969)
3	Percent of population that is black (1970)
4	Public and private high school graduates (1969-70) expressed as a percent of the total resident population (1970)
5	Percent of employed persons in professional, technical, and kindred occupations
6	Percent of population with college degrees (1970)
7	Total resident population (in thousands) (1970)
8	Dollar amount of state tax capacity per capita as measured by the "representative tax system" of the Advisory/Commission on Intergovernmental Relations (1970)
9	State expenditures on higher education expressed as a percent of state and local expenditures (1970)
10	Median family income (1969)
11	Unemployment rate (1969-71)
12	Dependency ratio; percent of population 25 and under and 65 and older (1970)
13	Percent of net population growth from 1960 to 1970
14	Allocation ratio; percent of total state tax revenue devoted to higher education (1969-70) Source: U.S. Census data
15	Degree-credit enrollment in public two year colleges as a percent of undergraduate enrollment in all public institutions (1969-70)
16	Expenditures per student at public universities and four year colleges (1969-70)
17	Bachelor's degrees awarded as a percent of undergraduate degree-credit enrollment in all public institutions (1969-70)
18	Ratio of graduate and first professional enrollment in public institutions to bachelor's degrees awarded by public institutions (1969-70)
19	Average tuition paid at public universities and four year colleges (1970)
20	Full-time equivalent enrollment in all public higher education institutions (1969-70) divided by total resident population (1970) (Multiplied by 1000)
21	Total state tax revenue appropriations for higher education (1969-70) divided by total state personal income (1970) (Multiplied by 1000)
22	Average tuition paid at public universities and four year colleges (1970) divided by state personal income (1970) (Multiplied by 1 million)
23	Total state tax revenue appropriations for higher education (1969-70, in thousands) divided by total state resident population (1970, in thousands)
24	Total state tax revenue appropriations for higher education (1969-70) divided by full-time equivalent public enrollment (1969-70) (Divided by 1000)
25	Total state personal income (1970) divided by total resident population (1970) (Divided by 1000)

[a] Dates in parentheses are years for which data was gathered.

Table 2

Means and Standard Deviations for Variables

Variable #	Mean	Standard Deviation
1	53.9901	26.7344
2	11.6235	5.1685
3	9.9999	12.6481
4	14.8405	2.1436
5	14.6823	2.2860
6	7.6509	1.8018
7	3983.9412	4310.7070
8	239.8431	46.3627
9	95.6858	6.0817
10	9177.3906	1459.9294
11	5.5020	2.1162
12	56.5685	1.7759
13	13.4195	12.7502
14	13.4607	3.6039
15	17.6117	16.0826
16	906.5293	202.4506
17	12.1235	2.8727
18	124.2474	41.2246
19	375.8235	152.5923
20	23.8176	7.9501
21	8.5098	2.4319
22	0.0762	0.1031
23	31.0703	8.6781
24	1.3778	0.4166
25	3.7230	0.6155

Table 3

Varimax Rotated Factor Matrix for 25 Variables [a]

Variable #	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
1	-0.28934	0.28045	0.29301	-0.57126	-0.19004	0.45033	0.22866	0.16229
2	-0.10391	-0.28391	-0.03977	-0.15660	-0.07450	**-0.89573**	-0.12248	-0.02266
3	-0.53122	0.18968	0.06087	-0.25135	0.07904	-0.51815	0.00667	0.47643
4	0.54928	-0.14869	-0.19040	0.37105	-0.27464	0.23637	-0.50609	-0.18032
5	-0.02676	**0.90591**	0.07683	0.01697	0.04570	0.26558	0.08547	-0.12366
6	0.01239	**0.90367**	0.03737	-0.10559	0.00487	0.17473	0.19424	0.20594
7	-0.20454	-0.09391	**0.82196**	-0.23167	0.07886	0.25148	-0.05971	0.01744
8	0.00456	0.38717	0.00541	0.18918	0.01350	0.34085	**0.66697**	0.17757
9	-0.13164	-0.09474	**-0.91886**	-0.04917	0.05130	-0.03869	-0.05421	-0.05359
10	-0.07205	0.44405	0.14300	-0.02622	0.30748	**0.76161**	0.18761	-0.08039
11	0.12688	0.27053	-0.01002	0.11145	0.58386	0.28602	0.04102	-0.53824
12	0.38067	-0.08312	-0.20116	0.28032	-0.16080	-0.44933	-0.45996	-0.28113
13	-0.03205	0.19969	0.05137	-0.01523	0.05834	0.19139	**0.83992**	-0.22482
14	**0.84664**	-0.26484	-0.03129	0.00513	-0.08580	0.01263	-0.04636	-0.05185
15	0.01257	0.31138	**0.76591**	-0.14980	-0.02989	0.03916	0.14766	0.28624
16	-0.01284	0.13782	0.26177	0.04839	0.16771	0.15127	-0.04808	**0.87748**
17	0.12660	**-0.73978**	-0.24230	0.18806	-0.38087	-0.10702	-0.33763	-0.06614
18	-0.00284	0.04678	0.41090	-0.34406	-0.00557	0.61729	0.19417	0.05720
19	-0.19193	-0.30863	0.06524	**0.74291**	-0.26004	0.18804	-0.02375	0.05847
20	**0.82060**	0.16624	0.08496	0.08930	-0.46594	-0.05024	-0.02951	-0.13749
21	**0.94483**	-0.06361	-0.05543	0.01790	0.06399	-0.20469	-0.09721	0.00925
22	0.14427	0.11412	-0.22396	**0.89405**	0.01636	-0.08826	0.08432	-0.02479
23	**0.90841**	0.17982	0.05860	-0.04901	0.24662	0.13908	0.05977	0.07982
24	-0.07722	0.12196	-0.02997	-0.12404	**0.92140**	0.12320	0.08308	0.17344
25	-0.22495	0.54083	0.16125	-0.14009	0.30040	0.60550	0.25560	0.17986

[a] Outlined figures are loading variables for each factor.

Table 4

Loading Variables for Eight Selected Factors[a]

Factor		Loading Variables
1) Support	#14	Allocation ratio; percent of total state tax revenue devoted to higher education (1969-70)
	20	Full-time equivalent enrollment in all public higher education institutions (1969-70) divided by total resident population (1970) (Multiplied by 1000)
	21	Total state tax revenue appropriations for higher education (1969-70) divided by total state personal income (1970) (Multiplied by 1000)
	23	Total state tax revenue appropriations for higher education (1969-70), in thousands) divided by total state resident population (1970, in thousands)
2) Demand	5	Percent of employed persons in professional, technical, and kindred occupations
	6	Percent of population with college degrees (1970)
	17	Bachelor's degrees awarded as a percent of undergraduate degree-credit enrollment in all public institutions (1969-70)
3) Support for Community Colleges	7	Total resident population (in thousands) (1970)
	9	State expenditures on higher education expressed as a percent of state and local expenditures (1970)
	15	Degree-credit enrollment in public two year colleges as a percent of undergraduate enrollment in all public institutions (1969-70)
4) Tuition	19	Average tuition paid at public universities and four year colleges (1970)
	22	Average tuition paid at public universities and four year colleges (1970) divided by state personal income (1970) (Multiplied by 1 million)
5) Expenditures	24	Total state tax revenue appropriations for higher education (1969-70) divided by full-time equivalent public enrollment (1969-70) (Divided by 1000)
6) Income	2	Percent of families in low income bracket (1969)
	10	Median family income (1969)
7) Potential Tax Resources	8	Dollar amount of state tax capacity per capita as measured by the "representative tax system" of the Advisory/Commission on Intergovernmental Relations (1970)
	13	Percent of net population growth from 1960 to 1970
8) Institutional Support	16	Expenditures per student at public universities and four year colleges (1969-70)

[a] Factor labels included for identification purposes only.

Table 5

Factor Scores for Eight Factors by State

State	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Alabama	-0.935295	-0.623215	-0.012257	-0.377442	-0.549025	-1.456865	-0.379335	-0.001957
Alaska	0.005246	1.629742	-0.652454	0.754825	4.855371	-0.628420	0.463188	-2.719188
Arizona	0.828374	0.826790	1.243320	-0.145082	-1.309451	-0.631192	1.351044	-1.023668
Arkansas	0.364294	-1.274216	-0.382981	-0.381586	0.066307	-1.866239	0.242834	-0.654688
California	0.560724	1.056843	4.078411	-0.178804	-0.222575	0.225704	0.464231	-0.778327
Colorado	1.072264	0.899563	-0.527656	-0.228256	-1.519501	0.374723	0.654892	0.536393
Connecticut	-0.867639	0.481965	-0.805445	-0.896432	-0.101613	1.903059	0.249632	-0.149368
Delaware	-0.492950	1.690824	-0.699910	0.666826	-0.590328	0.272697	0.592712	-0.110279
D.C.	-2.010888	3.630876	-1.082849	-0.882193	0.849438	-1.230754	-0.404587	3.881085
Florida	-0.077735	-0.400748	1.108229	-0.094331	0.085585	-0.925228	1.746014	1.257962
Georgia	-0.506030	-1.089952	0.083141	-0.208450	0.504687	-0.827252	0.399108	0.577905
Hawaii	1.528902	0.763745	-1.451741	-1.430733	0.844655	1.146315	-0.250799	1.004108
Idaho	1.599520	-0.117522	-0.847805	-0.419386	0.713433	-0.460792	-0.351796	-0.390021
Illinois	0.179756	-0.332363	1.515780	-0.619786	0.870359	0.681113	0.021447	0.969716
Indiana	-0.037468	-1.349207	-0.465102	-0.239577	0.278449	1.442893	-0.041852	0.623454
Iowa	0.634053	-1.242344	0.062152	0.843432	0.342451	1.073878	-0.875353	2.026314
Kansas	0.939708	0.138687	0.082651	-0.393862	-0.915917	0.104842	-0.369208	0.300431
Kentucky	0.041426	-1.479920	-0.201591	-0.567812	0.726602	-0.737429	-0.018491	0.181355
Louisiana	-0.365171	0.034264	-0.448534	-0.775000	-0.134678	-1.700564	0.205672	-0.788473
Maine	-0.384170	-0.887456	-0.795416	0.664847	0.927929	0.114982	-0.934930	-0.784410
Maryland	-1.164065	1.211492	0.601964	-0.181523	-1.196937	0.535719	0.359415	-0.097831
Massachusetts	-1.860546	1.212311	-0.198121	-0.722697	-0.439254	1.043183	-1.100206	-1.524220
Michigan	0.020543	-0.280648	1.170562	0.314090	0.383049	1.213948	-0.480454	-0.441753
Minnesota	0.206492	0.578282	-0.440971	-0.211053	-0.423811	0.603663	-0.930784	-0.801137
Mississippi	-0.839016	-0.171153	1.395772	0.699653	-0.568334	-3.224492	-0.648211	-0.530572
Missouri	-0.183616	-0.584619	0.257176	-0.492631	-0.274083	0.007068	0.220989	-0.039744
Montana	1.491107	-0.006925	-0.692421	0.124879	0.003607	0.113398	-0.646434	-0.216010
Nebraska	0.569194	-0.464774	-0.711176	0.157775	-0.539047	0.109663	-0.306375	0.274636
Nevada	-0.355137	-0.517408	-1.292625	0.261825	0.096567	0.730073	5.351871	-0.462276
New Hampshire	-1.614164	-0.262610	-0.790213	2.962501	-0.925242	0.560663	0.600429	-0.466950
New Jersey	-1.644912	0.171582	0.408712	-0.262259	0.202257	1.395998	-0.000603	-0.546369
New Mexico	0.716382	1.523601	-0.440383	-0.126738	-0.515414	-0.964246	-0.736905	-0.891943
New York	-0.484185	0.290736	2.977396	-0.353107	1.588704	0.627239	-0.571171	0.302721
North Carolina	0.341676	-1.793100	-0.077368	-0.493961	1.163543	-0.733916	0.156589	1.272678
North Dakota	1.590101	-0.152881	-0.423716	1.024427	-0.474522	-0.410206	-1.078358	-0.428803
Ohio	-0.980399	-0.667417	0.349437	0.320389	-0.538824	1.267489	-0.478662	0.051643
Oklahoma	-0.412382	0.109126	-0.538862	-0.632761	-1.516095	-0.483454	0.278208	-0.810683
Oregon	1.587888	-0.109923	0.275126	-0.491641	-0.455354	0.594939	0.641385	-0.098576
Pennsylvania	-1.466642	-1.032376	0.619327	0.236339	0.005442	1.300132	-0.953812	0.245190
Rhode Island	-0.294292	-0.669980	-0.508224	-0.685113	0.507021	1.106113	0.250441	-0.411421
South Carolina	-1.036855	-0.899845	-0.470591	-0.059860	0.385192	-1.114781	-0.666608	1.129613
South Dakota	0.339203	-0.557408	-0.806853	0.681788	-1.136424	-0.228684	-1.148844	-0.530248
Tennessee	-0.708765	-1.087008	-0.305011	-0.679926	-0.393693	-0.826633	0.326901	-0.269200
Texas	0.181652	0.000391	0.803136	-1.191560	-0.306057	-0.803688	0.522263	-0.315204
Utah	1.179431	1.470996	-0.706281	-0.070395	-1.333888	0.058318	-0.856402	-0.992229
Vermont	-0.372763	0.335942	-0.330902	4.038632	0.577342	-0.025139	-0.487269	0.093897
Virginia	-0.776591	-0.039340	-0.376899	-0.535764	-0.457700	0.111085	0.061386	0.409743
Washington	2.218039	0.755608	-0.007118	-0.819496	0.930957	0.454650	0.255167	0.387175
West Virginia	0.407637	-1.101948	-0.703547	-1.175247	0.400883	-0.423484	-0.776826	-0.340299
Wisconsin	0.521056	-0.351248	0.412804	0.444901	-0.221401	0.855473	-0.804750	-0.080954
Wyoming	1.728504	0.554110	0.707101	3.008448	-0.175832	-0.416405	0.859963	1.977392

Table 6

Factor Distance, Total Distance and Rank of Each State in Relation to New Jersey[a]

State	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Total	Distance	Rank
NEW JERSEY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Ohio	.442	.704	.004	.339	.549	.017	.229	.358	2.642	1.625	1
Connecticut	.604	.096	1.474	.402	.092	.237	.063	.158	3.146	1.774	2
Pennsylvania	.032	1.450	.044	.249	.039	.011	.909	.627	3.361	1.833	3
Rhode Island	1.824	.708	.841	.179	.093	.089	.063	.013	3.810	1.952	4
Michigan	2.773	.205	.580	.332	.033	.033	.230	.011	4.197	2.049	5
Maryland	.231	1.081	.037	.007	1.958	.740	.130	.201	4.385	2.094	6
Massachusetts	.046	1.083	.368	.212	.412	.126	1.209	.956	4.410	2.100	7
Virginia	.756	.044	.617	.086	.436	1.651	.004	.914	4.506	2.123	8
Missouri	2.135	.572	.023	.053	.227	1.929	.049	.257	5.245	2.291	9
Minnesota	3.428	.165	.722	.003	.392	.628	.865	.065	6.268	2.504	10
Wisconsin	4.691	.273	.000	.500	.179	.292	.647	.217	6.799	2.607	11
Indiana	2.520	2.313	.764	.000	.006	.002	.002	1.368	6.975	2.641	12
Delaware	1.107	2.308	1.229	.863	.628	1.262	.352	.190	7.939	2.818	13
Maine	1.489	1.122	1.450	.860	.527	1.641	.873	.057	8.119	2.849	14
Illinois	3.329	.254	1.226	.128	.446	.511	.000	2.299	8.193	2.862	15
Tennessee	.768	1.584	.309	.158	.355	4.940	.107	.082	8.503	2.916	16
Oklahoma	1.519	.004	.898	.137	2.953	3.532	.078	.070	9.191	3.032	17
Georgia	1.297	1.591	.106	.003	.091	4.943	.160	1.264	9.455	3.075	18
Nebraska	4.902	.405	1.254	.176	.550	1.655	.093	.674	9.709	3.116	19
Texas	3.336	.029	.156	.865	.258	4.839	.273	.053	9.808	3.132	20
Alabama	.504	.632	.177	.013	.564	8.139	.143	.296	10.468	3.235	21
Kansas	6.680	.001	.106	.017	1.250	1.667	.136	.717	10.574	3.252	22
Kentucky	2.844	2.727	.372	.093	.181	4.552	.000	.530	11.299	3.361	23
New York	1.347	.014	6.599	.008	1.922	.591	.326	.721	11.528	3.395	24
West Virginia	4.213	1.622	1.237	.834	.039	3.311	.603	.042	11.901	3.449	25
South Carolina	.370	1.148	.773	.041	.033	6.304	.444	2.809	11.922	3.453	26
Oregon	10.431	.079	.018	.053	.432	.645	.412	.201	12.291	3.506	27
Louisiana	1.638	.019	.735	.263	.114	9.589	.043	.039	12.460	3.529	28
South Dakota	3.937	.531	1.478	.891	1.792	2.660	1.318	.000	12.587	3.548	29
New Hampshire	.001	.008	1.437	9.149	1.271	.698	.361	.006	12.931	3.596	30
Montana	9.835	.032	1.212	.150	.039	1.645	.417	.109	13.439	3.666	31
Colorado	7.383	.530	.877	.001	2.964	1.043	.430	1.172	14.400	3.795	32
New Mexico	5.576	1.828	.721	.018	.568	5.371	.572	.119	14.973	3.869	33
Florida	2.456	.334	.489	.028	.014	5.388	3.051	3.256	15.016	3.875	34
Arkansas	1.640	2.090	.627	.014	.018	10.642	.059	.012	15.102	3.886	35
Arizona	6.117	.429	.700	.013	2.285	4.109	1.827	.228	15.703	3.963	36
Utah	7.977	1.688	1.243	.037	2.360	1.789	.732	.199	16.025	4.003	37
Iowa	5.194	2.002	.120	1.223	.020	.104	.765	6.619	16.047	4.006	38
Idaho	10.526	.084	1.579	.025	.261	3.448	.123	.024	16.070	4.009	39
North Carolina	3.947	3.114	.236	.054	.924	4.537	.025	3.309	16.146	4.018	40
North Dakota	10.465	.105	.696	1.656	.458	3.262	1.162	.014	17.818	4.221	41
Hawaii	10.073	.357	3.461	1.365	.413	.078	.063	2.404	18.214	4.268	42
Washington	14.923	.341	.173	.311	.531	.886	.065	1.285	18.515	4.303	43
California	4.865	.784	13.467	.007	.180	1.370	.216	.034	20.943	4.576	44
Vermont	1.618	.027	.547	18.498	.141	2.020	.237	.410	23.498	4.847	45
Mississippi	.666	.117	.974	.925	.593	21.349	.419	.000	25.043	5.004	46
Wyoming	11.380	.146	.089	10.698	.108	3.285	.741	6.370	32.817	5.729	47
Alaska	2.723	2.126	1.126	1.034	21.651	.590	.215	4.721	34.186	5.847	48
Nevada	1.664	.475	2.895	.275	.011	.443	28.649	.011	34.423	5.867	49
D. C.	.134	11.967	2.225	.384	.419	6.900	.163	19.602	41.794	6.464	50

[a] Total (Column 9) is sum of distances from New Jersey on eight factors. Distance is square root of that sum, as calculated with the distance formula.

Table 7

Postsecondary Governance and Planning in Comparable States, 1975-76

State	Statewide Agency Type	Master Plan	Special Commissions/Reports	Priority Goals
Connecticut	Commission for Higher Education Regulatory Coordinating Board.	"Master Plan for Higher Education, 1974-79. Quality and Equality." January, 1974. "Biennial Supplement, 1976." January, 1976.	None previously. No plans for one.	Access Flexibility Efficient resource utilization
Maryland	Council for Higher Education. Advisory Coordinating Board.	"Master Plan for Higher Education." November, 1968. Revised Master Plan forthcoming, 1976.	Rosenberg Commission studied governance structure. Report issued April, 1974. (Council responded to Report, September, 1975).	Access Efficiency Institutional autonomy
Massachusetts	Board of Higher Education. Regulatory Coordinating Board.	No plan.	Report of Massachusetts Advisory Council on Education, June 1973, emphasized access and planning. Also, Task Force on Massachusetts Higher Education issued report on financing in June, 1974.	Access Choice
Michigan	Board of Education. Regulatory. Council for Postsecondary Education. Advisory to Board.	"State Plan for Higher Education." February, 1970.	Nine month Commission studied feasibility of separate coordinating board, 1974-75. Recommended, but was not adopted.	Institutional autonomy Efficient resource utilization Student needs projection
Ohio	Board of Regents Regulatory Coordinating Board.	"Ohio Master Plan for Public Policy in Higher Education." 1971. Revised Spring, 1976.	Citizen's Task Force on Higher Education studied problems of postsecondary system. "Final Report." May, 1974.	Access Lifelong learning Excellence

Table 7, Continued

Postsecondary Governance and Planning in Comparable States, 1975-76

State	Statewide Agency Type	Master Plan	Special Commissions/Reports	Priority Goals
Pennsylvania	Board of Education. Regulatory. Council of Higher Education. Component of Board.	"Master Plan for Higher Education in Pennsylvania." May, 1971.	None previously. May organize Commission to study two-year colleges.	Access Diversity Equal opportunity
Rhode Island	Board of Regents. Consolidated governing Board. Postsecondary Education Commission. Subcommittee of Board.	"Five Year Plan." Spring, 1976.	Commission to Study the Entire Field of Education (Thibeault Commission). Final report, June 1968, used as planning document until 1976.	Access Choice
Virginia	Council of Higher Education. Regulatory Coordinating Board.	"The Virginia Plan for Higher Education." 1974.	General Assembly (Legislative) Committee on Higher Education, 1973-74. Recommendations were substance of Master Plan.	Access Excellence Lifelong learning Accountability
New Jersey	Board of Higher Education. Regulatory Coordinating Board.	"Goals for Higher Education in New Jersey." January, 1970 (Phase I). "A Development Plan for Higher Education in New Jersey." 1974 (Phase II).	Commission on Financing Postsecondary Education (Booher Commission). Studied alternative financing plans for future. Final report, December, 1976.	Access Equal opportunity Diversity Equity Flexibility

Sources: See Berdahl (1971) and Carnegie Commission Supplement (1976).
See also cited Master Plans and Commission Reports.

Table 8

Postsecondary Budgeting and Financing Policies in Comparable States, 1975-76[a]

State	Budget Submission Process	Subsidies: Public Sector	Subsidies: Independent Sector	Subsidies: Student Aid	Tuition Policy	Public Sector Tuition/Fees	$
Connecticut	Institutions submit requests to Commission, which revises and recommends to legislature.	Commission identifies peer institutions in 20 states with similar per capita income. Subsidy based on median subsidy of these peers.	Two contractual programs for facilities services ($3.1 million).	$100 to $1000/year. Based on merit, then need ($2.2 million).	No formula. Tuition is a state tax. Institutions set fees, which they keep.	2 Yr. Tech. 4 Yr. Univ.	265-279 242-250 525-601 750-800
Maryland	Institutions submit requests directly to Governor. No other review.	No formula except to community colleges. ($100 or $1100/FTE). Enrollment is a factor in 4 year institutions' subsidies.	Subsidy is 15% of average instructional cost per FTE student in state colleges, multiplied by FTE enrollment in independents ($4.4 million).	$200 to $1500/year. Based on merit and need ($5.0 million).	No formula. Tuition based on appropriations, enrollments, need.	2 Yr. 4 Yr. Univ.	320-400 500-550 690-737
Massachusetts	Institutions submit requests to sector boards who review and submit to Governor, board and legislature. Governor and Board recommend to legislature.	No formula. Subsidies awarded incrementally each year by legislature.	No direct subsidy.	$300/in-state public $600/out-of-state public $900/any private Based on need ($12.0 million).	Sector boards set tuition based on two formulas: 1) faculty lines/student headcount and 2) all personnel instruction and student services/ student headcount.	2 Yr. 4 Yr.	300 500
Michigan	Institutions submit requests to Bureau of Budget. Department publishes annual "Blue Book" of budget recommendations.	No formula. Allocations made on basis of institutional requests.	Public Act authorizes subsidies on basis of degrees conferred ($2.0 million), $200 to $400/undergraduate degree.	$100 to $1200 or tuition and fees (lowest)/year. Based on merit and need ($25.4 million).	No formula. Institutions set tuition levels autonomously.	2 Yr. 4 Yr. Univ.	320-480 513-688 570-845
Ohio	Institutions submit requests to Board of Regents. Board submits recommendations to Budget Office and legislature.	Formula based on enrollments in public institutions of FTE students under 16 classifications.	Contracted services to provide programs not available in public sector ($1.0 million).	$90 to $600/public $150 to $1500/private Based on need ($20.2 million).	No formula. Statutory maximum of $210 per quarter in public sector.	2 Yr. Tech. 4 Yr. Univ.	300-450 300-630 495-630 495-630

[a] It should be noted that the data for tuition and fees is for FY76. In many states, tuition and fees were increased for FY77.

Table 8, Continued

Postsecondary Budgeting and Financing Policies in Comparable States, 1975-76

State	Budget Submission Process	Subsidies: Public Sector	Subsidies: Independent Sector	Subsidies: Student Aid	Tuition Policy	Public Sector Tuition/Fees
Pennsylvania	Institutions submit requests to Department of Education, Board of Education and Board of State College & University Directors. They recommend to Governor but do not revise requests.	No formula, except to community colleges (no more than $500/student). Secretary of Education divides subsidy to state colleges evenly over 15 units.	Contracted services to certain institutions for special programs, such as medical/dental ($33.8 million).	$100 to $1200/in-state $100 to $600/out-of-state Based on need ($76.4 million).	No formula. Secretary of Education raises on recommendation of State Board.	$ 2 Yr. 413-570 4 Yr. 800 Univ. 800
Rhode Island	Institutions submit requests to Board of Regents which recommends to Governor, who recommends to legislature.	No formula. Allocations awarded to institutions on basis of budget request.	No direct subsidy except $400,000 to Brown University Medical School.	Awards to $1000/year. Based on achievement, then need ($2.1 million).	No formula. However, Board is currently developing policy based either on percent of instructional costs or characteristics of individual institutions.	2 Yr. 360 4 Yr. 504 Univ. 710
Virginia	Institutions submit requests to Council and State Budget Office. Council submits to General Assembly and Budget Office to Governor, who submits to Assembly.	No formula. Allocations awarded to institutions on basis of budget request.	No direct subsidy. 1974 Master Plan recommended constitutional amendment providing aid to private sector.	$200 to $400/year. Based on need ($8.3 million).	No formula. Institutions set own tuition levels.	All Sectors: Range = 420-944
New Jersey	Institutions submit requests to Department and to State Budget Bureau, which recommends to Governor. Governor presents to Legislature.	Subsidies to 4-year senior institutions based on type of institution and type of FTE enrollments. County colleges allocated $600 per FTE student.	Subsidies per student for enrollment of NJ residents, specialized graduate programs and computer/library services ($6.0 million).	$500 to $1000/in-state $500/out-of-state $200 to $1000/independent in-state Based on merit and need ($29.0 million).	No formula. Tuition set by Board. Increases based on additional costs.	2 Yr. 350-400 4 Yr. 535 Univ. 585

Table 9

Undergraduate Student Financial Aid Policy in Comparable States, 1975-76

State	Agency/Program	Award Policy	Portability
Connecticut	State Scholarship Program	Award based on academic merit. Most needy are selected from achievement pool. Awards range from $100 to $1,000 per year.	No limitations. (Over one-half go out-of-state.)
	College Continuation Grant	Award granted to upper division students who may not have been previously eligible for aid or who transferred from two year schools.	No limitations.
	Student Loan Foundation	Administers state guaranteed loans.	
Maryland	State Scholarship Board	Award based on merit and need. Awards range from $200 to $1500 per year and are based on one-half to three-quarters the cost of instruction at student's chosen institution.	Must be used in state.
	Higher Education Loan Corp.	State guaranteed loans: maximum undergraduate loan is $1,500 per year.	No limitations.
Massachusetts	General Scholarship Program	Award based on need, granted to students with zero parental contribution. Awards are of three types: $300 for in-state public college students, $600 for out-of-state public college students and $900 for any independent school student.	Between 10% and 25% of appropriated scholarship money must go to public institutions.
	Honor Scholarships	Top 5% of general scholarship applicants receive full tuition grant.	
	Higher Education Assistance Corp.	Administers state guaranteed loans.	
Michigan	State Competitive Scholarship Program	Award based on merit, then need. They range from $100 to $1,200 or tuition and fees, whichever is less.	Must be used in state.
	Tuition Grant Program	Award based on need to independent college students only. $100 to $1,200 or tuition and fees, whichever is less.	
	State Guaranteed Loan Program	State guaranteed loans: maximum undergraduate loan is $1,500 per year.	No limitations.
	Direct State Loan Program	Sliding scale loans for students unable to obtain from private lenders.	No limitations.
Ohio	Ohio Instructional Grants Program	Award based on need. Awards range from $90 to $600 for public college students and $150 to $1,500 for independent college students. A student whose family adjusted gross income is not more than $17,000 is eligible.	Must be used in state.

Table 9, Continued

Undergraduate Student Financial Aid Policy in Comparable States, 1975-76

State	Agency/Program	Award Policy	Portability
Pennsylvania	Pennsylvania Higher Education Assistance Agency	Award based on need. Minimum award is $100 for all recipients. Maximum award is based on one-third financial need, 80% of tuition and fees or $1,200, whichever is least, for in-state students. Similar formula or $600, whichever is least, is used for out-of-state students. Administers guaranteed loans also. Maximum undergraduate loan is $2,000 per year.	No limitations.
Rhode Island	State Scholarship Program	Award based on merit, then need. They range to $1,000, depending on amount of parental contribution. Number of awards is limited to top 5% of high school graduating class.	No limitations. (One-third of scholarships go out-of-state.)
Virginia	College Scholarship Assistance Program	Award based on need; ranges from $200 to $400.	In-state only.
	Tuition Assistance Loan Program	State administered loans for independent college students only. Standard award is $400.	
	State Educational Assistance Authority	Administers state guaranteed loans.	
New Jersey	State Scholarship Program	Award is competitive, amount based on type and location of institution. Maximum award is $1,000 for in-state college students and $500 for out-of-state college students.	No more than 35% out of state.
	Tuition Aid Grants	Awards of up to $1,000 for students in independent, in-state institutions.	In-state, independent.
	Educational Opportunity Fund	Awards for economically and educationally disadvantaged with family incomes of $10,000 or less. Awards range to $750 for commuters and $1,000 for resident students. Eligibility depends on student's college, through which funds are allocated.	No more than 10% out of state.
	Higher Education Assistance Authority	Administers state guaranteed loans.	No limitations.
	Graduate Insured Loan Program	Grants state guaranteed loans up to $2,500 per year. An additional $1,250 is available at current interest rates to students in schools of dentistry, medicine, vetinary medicine and osteopathy.	Limitation on type of professional school.
	Public Loan Program	State will lend up to $2,500 to students denied loans from at least three private lenders. (Not currently funded.)	No limitations.

Table 10

Enrollments, Aid Recipients and Average Aid Awards in Comparable States, 1974-75

STATE	HEADCOUNT ENROLLMENT[a]						STUDENT AID[b]		
	Public #	Public % of Total Enrollment	Independent #	Independent % of Total Enrollment	Total	% of State Population	# of Aid Recipients	Recipients/ Enrollment	Average Award
Connecticut	91,100	62.9%	53,800	37.1%	144,900	4.7%	7,947	5.5%	$694
Maryland	153,400	82.2	33,200	17.8	186,600	4.6	2,055	1.1	633
Massachusetts	151,000	43.0	199,800	57.0	350,800	6.0	18,789	5.4	608
Michigan	397,000	87.7	55,600	12.3	452,600	5.0	24,386	5.4	790
Ohio	308,700	75.6	99,700	24.4	408,400	3.8	43,902	10.7	432
Pennsylvania	268,300	60.0	178,500	40.0	446,800	3.8	112,743	25.2	631
Rhode Island	31,000	52.2	28,400	47.8	59,400	6.3	2,786	4.7	733
Virginia	186,100	86.6	28,900	13.4	215,000	4.4	1,602[c]	.7	458
New Jersey	206,900	75.4	67,400	24.6	274,300	3.7	46,034	16.8	533
United States	7,892,200	77.8	2,247,700	22.2	10,139,900	4.8	813,040	8.0	542

[a] Source: Carnegie Commission. The States and Higher Education Supplement. 1976 (Figure A-9). (Graduate and undergraduate).

[b] Source: "State Scholarship Programs" (Fact-File). Chronicle of Higher Education. October 11, 1976 (p. 7-8).

[c] In 1976-77, Virginia awarded 8,000 students with scholarships which averaged $237 per student. Although the number of recipients has increased 500%, the amount of average award per recipient has decreased by nearly one-half. The absolute dollar allocation increased from $733,716 to $1,896,000, an increase of 150%.

Table 11

Wealth, and Taxes Appropriated for Postsecondary Education in Comparable States, 1974-75

State	Income/ Capita[a]	Higher Education Appropriation/ Capita[b]	Higher Education Appropriation/ $1,000 of personal income[b]	Higher Education Appropriation/ Tax Revenue[c]	Higher Education Appropriation/ Public FTE's[c]
	$	$	$	%	$
Connecticut	6455	44.90	6.43	6.4	2060
Maryland	5943	50.61	7.82	8.6	1970
Massachusetts	5757	35.74	5.85	4.7	1630
Michigan	5883	60.79	9.85	9.6	1930
Ohio	5518	41.79	7.22	8.8	1930
Pennsylvania	5447	52.63	8.86	9.0	2330
Rhode Island	5343	51.40	8.83	8.4	2020
Virginia	5339	55.77	9.64	11.1	1850
New Jersey	6247	36.57	5.44	6.1	1930
Range	$1528	$25.05	$4.41	6.4%	$700

[a] Carnegie Commission. The States and Higher Education Supplement. 1976 (Figure A-1).

[b] Data is for 1975-76 appropriations, with latest published figures of the U.S. Department of Commerce for 1975. Adapted from figures for 1976-77, in Chronicle of Higher Education, October 25, 1976.

[c] "State Support of Colleges: A New Way to Analyze It," Chronicle of Higher Education. March 8, 1976, (p. 4-5). Tax revenue includes state and local taxes.

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Table 12

Distribution of Budget Allocations to Postsecondary Sectors in Comparable States, 1975-76[a]

State	Public Universities	Public Four Year Colleges	Public Two Year Colleges	Independent Colleges	Medical/Dental Prog.[b]	Technical Programs	Student Aid: Grants/Schol.	Special Projects	Administration	Dollar Appropriation (in millions)	Total Public Campuses
	%	%	%	%	%	%	%	%	%	$	
Connecticut	36.9	21.8	14.5	2.2	13.6	3.7	3.2	.1	3.8	138.8[c]	27
Maryland	57.5	21.1	14.9	2.1	-	-	2.4	.5	1.5	207.5	26
Massachusetts[d]	40.3	23.1	14.5	-	-	8.6	5.9	-	7.6	208.0	31
Michigan	44.7	24.8	16.0	.3	7.8	2.5	3.8	.1	-	556.8	48
Ohio[e]	74.4	-	8.7	.2	7.0	4.0	4.4	1.0	.3	451.6	65
Pennsylvania	34.6	24.2	4.9	3.5	3.9	-	12.8	1.9	14.2[f]	622.6	57
Rhode Island[g]	55.3	23.4	15.0	-	1.8	-	4.4	.1	-	47.8	3
Virginia[h]	30.4	19.4	21.5	-	8.8	17.7	1.4	.1	.7	272.7	39
New Jersey	30.0	25.4	11.8	2.2	15.4	3.6	10.9	.1	.6	267.7	30

[a] Source: Percentages were calculated from appropriation figures (Column 10) in M.M. Chambers. Appropriations of State Tax Funds for Operating Expenses in Higher Education, 1975-76. National Association of State Universities and Land-Grant Colleges. Washington, D.C., 1975. Figures do not include capital outlay and student tuition receipts.

[b] Some states did not distinguish appropriations made to medical/dental schools, technical programs, special projects or administration. Michigan's allocation to medical/dental programs includes a $585,000 subsidy to a private dental school, and 50% of Pennsylvania's allocation is to private medical schools.

[c] Includes $2.2 million in scholarship aid which was not included in budget figures listed in Chambers.

[d] Data for Massachusetts is based on the 1973-74 distribution of the higher education appropriation.

[e] Ohio has 12 four year State Universities and 51 two year public university branches, general and technical colleges. Ohio's allocation to Medical and Dental programs includes a $5.0 million subsidy to Case Western Reserve, an independent university.

[f] This money was designated for "Interdepartmental Transfers," which are monies for non-instructional costs not appropriated directly to institutions.

[g] A second public two-year college, Blackstone Junior College, opened in September, 1976. This brings the number of public institutions in Rhode Island to four.

[h] Total amount of student aid reported for Virginia was inaccurate; scholarship aid was $1.3 million and special loans were $2.5 million. The resulting total appropriation was $3.8 million. or 1.4% of budget.

THE COMPARABLE STATES: DISCUSSION

Connecticut

The Commission for Higher Education in Connecticut published a Master Plan in 1974 and the first Biennial Supplement to that plan in January, 1976. Among the stated Master Plan goals are universal access for qualified persons, protection of academic freedom and institutional flexibility in responding to environmental changes and student "interests." Other goals are prescribed around the state's interests rather than the students' or the institutions'. The Connecticut Commission advocated full utilization of postsecondary resources through 1) their application to society's problems, 2) student training related to the state's economic, cultural and educational development and 3) enhancement of the quality and national leadership of its postsecondary institutions. In order to accomplish these goals, the Commission made over 100 recommendations in its original Master Plan, and an additional thirty in its supplement.

The majority of recommendations focused on organization, structure and finance of the higher education system, and interinstitutional cooperation, state assessment and institutional "mission" relevance in program planning. In its biennial supplement, the Commission recommended the establishment of equitable status for the proprietary sector and continuing education programs, and suggested several provisions for physically handicapped students. The Commission appeared to be satisfied with the state's progress in implementing several of the original recommendations. It is apparent from these goals and recommendations that Connecticut has placed priority on a systemwide perspective in higher education planning.

The Commission maintains centralized control over most postsecondary endeavors, including more academic activities such as research about types of programs offered, utilization of new modes and technologies in teaching and the identification of new clientele. Four Boards of Trustees oversee the four public sectors in the postsecondary system, including the University and branch campuses, the state colleges, regional community colleges and technical colleges. A representative from each of these boards sits on the 16 member Commission.[11]

Connecticut allocated 90.5% of its higher education appropriation to institutional subsidies in 1975-76; these are distributed on a per student basis to each of the state's 27 public sector institutions. Connecticut's method for calculating a per student subsidy level is unique among the comparable states, if not among all the states. The subsidy is based on the median of similar peer group subsidies in twenty states, which are deemed comparable to Connecticut in ability to support services, defined as income per capita.[12]

Public institutions submit annual budget requests to the higher education Commission, which revises the requests based on the calculated support level, and submits recommendations about the budgets to the legislature. The institutions also submit budget requests to the legislature on the same forms as other state agencies; final appropriation approval is influenced by the Commission's recommendations.

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[11] A current debate in the state's legislature concerns the governance structure of the public postsecondary institutions. Two alternatives for reorganization have been proposed; the first suggests that the four Boards be replaced by a single Board of Regents with power over all institutions. The second would replace the four Boards with two Boards, one for the University and state colleges and the other for two-year community and technical colleges.

[12] All of the comparable states except Virginia are included in Connecticut's calculation of a median per student subsidy.

The state appropriation is the major source of revenue for the public institutions because tuition receipts are considered a state tax and are transferred into the state treasury. There is no incentive, then, for the higher education system to raise tuitions; the current range of $200 to $350 in public tuition charges was established by Legislative mandate in 1971. However, institutions are permitted to retain fee receipts. The level of per student fee charges is higher in Connecticut than in any of the comparable states; fees range from $65 per year at the two year schools to $450 at the University, which is $100 more than tuition charges there.

Independent institutions receive about 2.3% of the higher education appropriation through contracted services for programs, facilities and tuition waivers for veterans. This compensation for contracted services amounted to $3.1 million for 25 independent institutions in 1975-76.

Students may take state scholarships to independent or public institutions in or out-of-state. The Scholarship Program awarded $2.2 million in grants ranging from $100 to $1000 per eligible student in 1975-76. The scholarships are based on merit, then need. [13]

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[13] In most states with merit scholarship programs, pupils must exhibit some minimum level of achievement, (i.e., class rank, grade point average, etc.) to be eligible for a scholarship. Students who also exhibit need, or little family ability to pay for college, are usually selected from the group of achievers. The number receiving scholarships is often limited by some percentage of the high school graduating class, or by state imposed financial constraints.

Maryland

Before July, 1976, Maryland's Council for Higher Education was primarily an advisory coordinating body which conducted research on development and planning in the system, and recommended facility and program policies. Operational control of the public postsecondary institutions is retained on a general level by sector governing boards (i.e. the Board of Regents for the University of Maryland, Board of Trustees for the state colleges, State Board for community colleges and the Boards of Trustees for Morgan State University and St. Mary's College). The State Board of Education maintains supervisory control over accreditation of programs and institutions. However, great emphasis has been placed on the management autonomy and flexibility of individual institutions and on broad involvement of parents, students and the general public in educational policy making.

A study Commission was appointed in 1973 to examine the effectiveness and efficiency of this "tripartite" governance structure. According to the Council for Higher Education, the Rosenberg Commission proposed a reorganization of the tripartite structure because the members believed that 1) institutional individuality had not been conducive to cooperative interaction for a common purpose in the system, 2) there was a lack of an integrating and coordinating mechanism, 3) the competitive perspective exhibited among sectors and institutions weakened the system and 4) the movement toward delivery of equitable educational services was too slow under the existing structure. The Rosenberg Commission therefore recommended the elimination of the tripartite structure, the strengthening of the central coordinating board through granting of more control powers (particularly over the budget) and the creation of a Joint Board for Education consisting

of the combined membership of the State Board of Education and the strengthened central coordinating board. The Commission's recommendations have not been adopted and the Council for Higher Education issued a "Response to the Rosenberg Commission Report" (September, 1975), in which it attempted to refute most of the Commission's arguments and related recommendations.

The Council requested in that report that it be granted certain powers which would not be as regulatory as the Rosenberg Commission proposed, but which would provide the Council a broader framework in which to perform its proper role. These powers focus on budget review and advisement, administration of Federal funds, recommendation of adequate student aid programs and various evaluative functions.[14]

The Council has issued a pamphlet delineating a transfer policy which provides for "maximum transferability" of college level credits within the public postsecondary sector.[15] Students are given detailed guidelines about an appeals process which they should follow if they are denied admission to a preferred postsecondary institution. This pamphlet represents the only formal, printed transfer policy evident among the comparable states.

The Council has also been involved in two controversies which were brought before the U.S. District and the U.S. Supreme Court, respectively, during the past year. The first case concerned the state's apparent failure to fulfill its postsecondary desegregation plan , which was submitted to and

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[14] The Council has been granted more powers and has recently undertaken internal reorganization to fulfill its newly acquired responsibilities.

[15] Student Transfer Policies. Maryland Council for Higher Education. Annapolis, Maryland, September 1975.

approved by the Department of Health, Education and Welfare (HEW) in 1974. That agency took action to cut off some $65.0 million in Federal aid because Maryland was not taking voluntary actions to eliminate racial segregation in its postsecondary system. A judgment by the District Court in March, 1976 barred the funds cut-off because 1) HEW had not exhausted efforts to negotiate the state's voluntary compliance to the plan and 2) it had not specified the programs in which evidence of discrimination had been found.[16]

A second court case resulted from Maryland's allocation of direct subsidies for operating expenses to certain church-related, independent postsecondary institutions. A citizen's group claimed the state was violating the First Amendment by granting aid to religious institutions. The U.S. Supreme Court ruled in favor of the state and its policy because it specifically stated that the subsidies could not be used for sectarian purposes or in seminary and theological degree programs.[17] The state allocated 2.1% ($4.4 million) of its annual higher education appropriation to in-state independent colleges in 1975-76.[18]

Subsidies to public postsecondary institutions comprised 93.5% of the higher education appropriation in 1975-76. Prior to July, 1976 public institutions submitted annual budget requests directly to the Governor's office without review by the Council. The Council now possesses certain review and recommendation powers which balance the approval power of state officials who previously had major influence on budget recommendations to the Governor.

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16 See "HEW Told to Keep Paying Maryland." Chronicle of Higher Education. (March 15, 1976. p. 1).

17 See "Aid to Church Schools Ruled Constitutional." Chronicle of Higher Education. (June 28, 1976. p. 3).

18 Four other comparable states, including New Jersey, allocate direct subsidies to church-related independent colleges.

The state allocated $5.0 million in state scholarship aid in 1975-76; grants are usable at either public or independent in-state institutions. The amount of the grant is based on one-half to three quarters of the cost (tuition) at the student's institution, and ranges from $200 to $1,500 per year.

Massachusetts

Concern has recently been generated at the state level over the public postsecondary system in Massachusetts because it has been "allowed to grow with little planning and coordination."[19] Under the current system, operating authority for the 30 public campuses in the state has remained with sector governing boards. The three campus University of Massachusetts has a Board of Trustees. Two technological institutions, Lowell and Southeastern, each have a Board of Trustees. Eleven state colleges are governed by a Board of Trustees, and the Board of Regional Community Colleges oversees 15 two year institutions.

The Board of Higher Education in Massachusetts is an arm of the Office of the Secretary of Education. Although the legislature has authorized several personnel positions on the Board, many of these remain vacant and the Board has not functioned with the fiscal or governance authority mandated to it. Currently, institutions submit prepared budget requests to the Governor's office, the legislature and the Board of Higher Education, all of whom review the requests and make recommendations about them. Apparently, the Secretary of Education continues to exert more influence on the final higher education budget appropriation than the Board. The Chancellor of the Board

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19 See "Massachusetts Charts New Course for Publicly Supported Higher Education." New York Times. January 18, 1976 (p. 39).

recognizes these problems and believes there should be a reorganization in the governance structure. The President of the Massachusetts Senate has recently proposed that at least the University and state colleges be merged under a unitary governing system.

The Massachusetts Advisory Council on Education released a study report on higher education in the state in June, 1973.[20] The report indicated that access to the public postsecondary sector was inadequate, primarily in terms of the existing scholarship program. The Council recommended that the student aid appropriation be increased from $8.0 million to $40.0 million in 1975-76. (The student aid appropriation for 1976-77 is $13.2 million, most of which is distributed in the form of general scholarships to students whose families have no ability to contribute.)[21] The Council suggested that a Master Plan for Higher Education be developed, although it was not specified whether the planning staff should be in the office of the Secretary of Education or under the Board of Higher Education. Massachusetts still does not have a Master Plan for the postsecondary system.

The Council also advocated the establishment of a comprehensive data collection system for better planning and intersector coordination, and stressed the need for support of the state's independent institutions. A majority (57%) of postsecondary students in Massachusetts are enrolled in independent schools;[22] the state has the largest proportion of students in independent colleges in the country, except the District of Columbia, where 82.2% of all postsecondary students are in independent schools.

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20 See Academy for Educational Development. "Higher Education in Massachusetts." New York, June, 1973. The contracted consultants who performed the study were specifically asked not to address the governance structure because the state was already considering a reorganization at that time.

21 "State Scholarship Programs." (FACT FILE) Chronicle of Higher Education. October 11, 1976 (pp. 7-8).

22 Many of these students are from out-of-state.

More recently, a task force investigated the financing of higher education in Massachusetts, and its effect on student access and choice.[23] The task force found that low and moderate income students have limited access to most independent institutions, public universities and the Massachusetts Institute of Technology. Non-white students have slightly limited access to public colleges and women have good access only at four year "general" (liberal arts) colleges. Choice is also limited for these groups in terms of types of institutions they can attend.

Four specific recommendations were proposed by the task force to increase access and choice for these groups. The major proposal, which would require approval through the State Constitution, was a program of "capitation grants" to be awarded to independent institutions for enrollment of additional low and moderate income resident students. Other recommendations included expansion of the need based student aid program, an increase in funds available through the state guaranteed loan program or an increase in public institution tuitions and concomitant increase in student aid for those with little ability to meet increased costs. These recommendations have not been implemented.

Massachusetts has the second highest number of students enrolled in all sectors of higher education, as a percentage of state population, among the comparable states. It has the lowest per student (public) state subsidy and the lowest proportion of state tax revenues appropriated to higher education.

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[23] The Task Force on Massachusetts Higher Education. "Financing Higher Education in Massachusetts: Policies for the Near Future." Cambridge, Massachusetts, June, 1974.

A sizable portion (6.2%) of its appropriation was allocated to the Board of Higher Education, in an amount of over $12.0 million, in 1975-76. This sum is large when compared to the .6% of budget allocated to the Department of Higher Education in New Jersey and .3% of budget allocated to the Ohio Board of Regents in that year; these states have comparable headcount enrollments, and Ohio has twice as many public institutions.

Despite the lack of coordination and systemwide planning, the quality of Massachusetts' independent institutions and the experimental activities of its public University, to which it allocates over 40% of its budget, are nationally recognized.

Michigan

The Carnegie Foundation believes that those states which have had the greatest freedom in the higher education system have also developed the most outstanding public institutions; it has commended the public institutions in Michigan for fighting with "great success to maintain their independence."[24] In its "State Plan for Higher Education," the Michigan Department of Education states: "Michigan has chosen to encourage the development of flexibility and diversity of educational programs and to stimulate initiative and innovation by providing substantial autonomy in several governing boards, subject to general planning and coordination by the State Board of Education."[25] Michigan has encouraged institutional

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24 See Carnegie Foundation. The States and Higher Education. San Francisco, California: Jossey-Bass, Inc., 1976 (p. 19).

25 1970. (p. III-32).

autonomy through policies designed to place primary responsibility for operation and control on the institutions through their governing boards, rather than in a state level office.[26]

The role of the Department of Education, which operates under the authority of the State Board of Education for all levels of education in Michigan, is to advise on coordination and planning of the postsecondary system and to develop research reports and informational planning documents.[27] The Associate Superintendent for Postsecondary Education supervises these activities and is Executive Secretary for the community college board and a member of the Michigan Council for Postsecondary Education, an advisory body. The State Board of Education approves new public institutions and programs, reviews and makes recommendations about institutional budget requests and administers grant programs for institutions and students. The Department also publishes a comprehensive handbook which lists pertinent information (i.e., admission requirements, program, student aid, costs) about all post-secondary institutions in Michigan, including proprietary and specialized schools.

A study Commission was appointed in 1974 to investigate the feasibility of establishing a separate coordinating board for higher education. The Commission recommended that such a Board be established, but the recommendation did not pass in the legislature. It is apparent that Michigan wishes to

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[26] The state's 13 four year public colleges and universities each have a separate governing board. The 29 two-year public institutions are governed by a state established Board for Public Community and Junior Colleges.

[27] The Associate Superintendent's office has published over 20 planning documents, including an annual "blue book", in which operating, capital, fiscal and facilities planning needs are outlined.

maintain the autonomous functioning of its public sector institutions, in this case by refusing to broaden the power base for state control of higher education.

Most of the state's postsecondary students (87.7%) are enrolled in the public institutions, which have been cited by the Carnegie Commission for their distinctive graduate programs and for their ability to obtain large Federal research grants.[28] Nearly 95% of the higher education appropriation of $556.8 million was allocated to public institutions, including medical, dental and technical schools, in 1975-76. Budget allocations are made on the basis of institutional requests which are submitted to the Bureau of the Budget and approved by the legislature with no regulatory intervention by the Department of Education. Institutions set their own tuition levels, which are not significantly higher than state mandated public tuitions across the country.

The state allocated $25.4 million (3.8% of the higher education budget) to its undergraduate student aid program that year; 52% was designated for students in public institutions and the remainder was designated for students in independent institutions. (Although enrollment is skewed heavily to public institutions, the state actually has more independent institutions.) A small sum ($2.0 million) is allocated directly to the independent institutions as a state subsidy for each degree granted to Michigan residents.

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[28] Michigan received $61.0 million for research from Federal sources in 1974; this was the fourth largest appropriation to public institutions among the 50 states.

Ohio

The Ohio General Assembly established a Citizen's Task Force in 1973 to examine the problems currently faced by the postsecondary system in the state. The task force focused its investigation on equal access and lifelong learning opportunity for all citizens, and on excellence through planning and adequate financing. The emphasis on access and lifelong education was based on the belief that the system had accommodated its growth needs and would not expand further.

The Citizen's group encouraged the postsecondary system to promote the participation of all adults and to provide incentives for students to stay in-state by rewarding and stimulating excellence in institutions and by supporting innovation in the system. The Task Force concluded that the overriding need was "to clarify and simplify the overall system, to get greater use from limited state resources, to remove unnecessary (program) duplication and to achieve greater diversity in programs and institutions."[29]

In this spirit, the Ohio Board of Regents has focused during the past two years on the improvement of existing practices and on the development of excellence in specific programs. The budgeting formula was reassessed and modified. A new program of state aid to independent colleges for courses of study not available at public institutions was established and funded with $1.0 million. Health education programs were reviewed, a Vice Chancellor for Health Affairs was secured and an ad hoc advisory committee was appointed to study the need for continuing health manpower education. The state has also undertaken a program in management improvement to increase the effectiveness of internal management practices. An appropriation of $2.2 million

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29 Citizen's Task Force on Higher Education: State of Ohio. "Final Report." May, 1974 (p. 15).

was allocated for a Regents administered Developmental Education Program for which postsecondary institutions receive funds to assist students in overcoming academic deficiencies.

The Regents also developed a planning document for Ohio's 53 two year campuses in 1975.[30] The goals outlined in the report include: 1) access for non-traditional students; 2) a broader range of two year programs and 3) the designation of at least one "local community" campus in each county. The Regents have set up several regional advisory committees to plan ways in which each two year college can work to accomplish these state goals.

Finally, the Regents are responsible, by statutory assignment, for the preparation of an annual budget recommendation for the state's public postsecondary institutions. The institutions submit requests to the Regents, who submit a unified recommendation to the Office of Budget and Management and the legislature. The allocation of resources to the institutions is determined according to a complex budget formula, in which students are classified into sixteen program categories. Berdahl has pointed out that the budget formula in Ohio is designed to influence main campus and branch campus enrollment ratios of lower and upper division students.[31]

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30 Ohio Board of Regents. "The Two-Year College System in Ohio: A Planning Report." Columbus, Ohio. March, 1975. The state has 25 two year university branches, five community colleges, four urban technical centers and 19 technical colleges.

31 Berdahl, R. O. Statewide Coordination of Higher Education. Washington, D.C.: American Council on Higher Education, 1971.

Ohio's public institutions received 93.1% of the higher education appropriation in 1975. Independent institutions received 1.2% of the budget in direct subsidies, most of which were allocated to the medical and dental programs at Case Western University. Less than 5% of the budget is used for student aid in the form of Instructional Grants. Of the $20.2 million awarded in grants in 1975-76, 47% went to students in the 52 independent postsecondary institutions.

Ohio resembles New Jersey most closely among the comparable states in percentage of state population enrolled in postsecondary education (3.7% to 3.8%), and in distribution of students between public and independent institutions (75% vs. 25%).

Pennsylvania

The higher education governance structure in Pennsylvania is one of the most complex among state level systems. All levels of education are governed by the State Board of Education, which has two branches, the Council for Higher Education and the Council for Basic Education. Each of these designated bodies has a chairman, and the chairman of the State Board governs all board and council activity. The Secretary of Education in Pennsylvania is the chief executive officer of the State Board, and also supervises the Department of Education, which houses the central office staff, including the Office of Higher Education. The Commissioner of Higher Education, who is the director of this office, is also executive officer for two advisory groups, the Board of State College Presidents and the Council of Community College Presidents.[32] The State College Presidents serve in an advisory capacity to the Board of State College and University Directors, which

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[32] There are 14 "state-owned" colleges and universities, 14 community colleges and three "state-related" universities, with 25 branches, in the public sector. These universities are Pennsylvania State University, Temple University and the University of Pittsburgh.

is the chief governing board for the state college system, and which has its own executive director. The Community college presidents serve in an advisory capacity to the State Board of Education. Three "state-related" universities in the Commonwealth are governed by their own boards of trustees.

There are then, three individuals in the state who exert power in various ways over the higher education system; their respective power bases have not been clearly delineated due to disparate requirements of each position.[33] These individuals are the Secretary of the State Board of Education, the executive officer of the Board of State College and University Directors and the Commissioner for Higher Education.

Despite this complexity in governance structure, Pennsylvania has developed substantial programs of support for its 86 independent institutions and for its enrolled postsecondary students, of whom over 25% receive aid each year. In 1974, $42.3 million was allocated for general support of nine "state aided" independent institutions, including Drexel University and the University of Pennsylvania and for contracted services at these and other independent institutions.[34] This allocation, together with $37.9 million awarded as grants to students in independent colleges, was the second highest amount distributed to independent institutions among all states in 1974. Pennsylvania has taken major steps in supporting and utilizing the higher education services of medical and other professional programs, which already exist in the private postsecondary sector.

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[33] Berdahl, Ibid. (Chapter 4.)

[34] Carnegie Foundation. The State and Higher Education Supplement. Berkeley, California. 1976, (Figure A-27).

The state also awards grant aid to the second highest amount of postsecondary students in the country (10.9% in the current year). The total student grant allocation of $70.4 million was distributed to 115,900 students with an average grant of $600 per student.[35] The number of students awarded grants in Pennsylvania equaled 25.2% of the total student population in that state.

The Council of Higher Education outlined several other objectives for the system in its 1971 Master Plan. They include defining institutional roles, coordinating a "commonwealth system" of governance, evaluating programs to avoid overlap, establishing financial priorities and increasing educational opportunities for disadvantaged students.[36]

A financing proposal was submitted by the Pennsylvania Association of Colleges and Universities[37] to the Governor, the State Board and the Department of education in January, 1974. The plan was developed around five financing objectives, which relate closely to the Council's master plan goals. These were to 1) meet public needs and state responsibilities; 2) maintain institutional accountability; 3) provide high quality education at the lowest reasonable cost; 4) conduct advance financial planning and 5) provide equality of opportunity.

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[35] "State Scholarship Programs" Op Cit.

[36] Although the expanded student aid program helped meet this last objective, the state still has a restricted open door policy due to a severe lack of facilities.

[37] Non-state controlled organization, whose members include over 100 public and independent institutions in the state.

Rhode Island

Rhode Island's four public postsecondary institutions are governed, as are the public elementary and secondary schools, by the State Board of Regents. A 1202 planning unit, the Postsecondary Education Commission, is a subcommittee of the Board.[38] The central office staff for the Board is the Department of Education, and the Bureau of Postsecondary Education is located in that Department.

A special commission "to study the entire field of education" in Rhode Island issued a final report in June, 1968. The commission made eleven recommendations about higher education in the state, most of which focused on enrollment and program expansion. The Board of Regents published a new five year plan in late 1976.

A primary concern of the postsecondary community over the past ten years has been the appropriate modification of the state's student aid policies. Under the current State Scholarship Program awards are based on merit and financial need. Scholarships are awarded to 5% of each year's high school graduating class, among whom nearly one-third carry their scholarships out-of-state. The maximum monetary award per student is $1000 each year.

A set of working documents were developed by the Bureau of Postsecondary Education in 1974-75. The staff studied student aid programs in other states and explored alternative programs for estimating student financial need and awarding aid grants based on need. The Bureau submitted a "Comprehensive Financial Assistance Program for Students Attending Postsecondary Education"

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38 "Section 1202 of the Education Amendments of 1972 to the Higher Education Act of 1965 authorized states so desiring to designate a new or existing state agency as the recipient for that state's share of whatever funds might become available under Section 1203 for the improvement of comprehensive postsecondary education planning. The law mandated that such agencies had to be 'broadly and equitably representative' of all units of public and private postsecondary education, including vocational education and proprietary schools." Quoted from Carnegie Foundation. The States and Higher Education (Supplement). Berkeley, California, 1976 (p. 52).

to the Regents 1202 Subcommittee in March, 1975. The plan advocated broad eligibility for an "entitlement" to needy students, through which the state would essentially subsidize a greater proportion of college going costs. Most of the additional subsidies, however, were to be in the form of loans.

The Regents contracted a group from the Harvard Graduate School of Education to analyze the proposed plan and determine whether its implementation would or would not result in achievement of postsecondary goals.[39] The analysts found that the plan would increase access by about 9% for the $3,000 to $6,000 and $9,000 to $12,000 income groups. The program would equalize the net cost to families across all types of institutions, but would not increase student choice because a large portion of the costs would be met by loans rather than direct grants. The most negative conclusion was that program costs would be prohibitively heavy and might cost the state an additional $31.0 million per year. Since the current higher education budget is only $47.8 million in Rhode Island, the additional costs would require a budget increase of 65%. The analysts strongly urged that the state revise its plan so that all other possible sources of aid, including institutional aid, are considered before state grant is calculated. The regular State Scholarship Program was still in effect for the 1976-77 school year.

The state's four public and ten independent postsecondary institutions enrolled 60,000 students, who constituted 6.3% of the state's population in 1974; this is the highest college attendance rate among the comparable states (including both in-state and out-of-state students). Nearly half of the students are enrolled in independent institutions.

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[39] See Weathersby, G. & Matthews, J. "Perspectives for Estimating the Impact of the Commissioner of Education's Proposal for Student Aid." Cambridge, Massachusetts: Harvard University, October, 1975.

The state allocates 94.5% of its higher education appropriation to public institutions. A $400,000 grant to the Brown Medical School is the only direct state allocation to an independent institution.

Virginia

The State Council for Higher Education in Virginia published a Master Plan in 1974, in which the goals of academic and financial access, excellence, accountability, and promotion of lifelong learning were emphasized. Discussion of goal implementation focused on the encouragement of lifelong learning through alternative program and length of study plans.

The Council recommended continued open access to the state's 24 two year colleges, and full-credit transfer for all Associate degree holders. It advocated increased use of equivalency programs and academic credit for life experiences, including an expanded cooperative education venture. The Council also proposed that state manpower studies be analyzed so that future needs are accommodated through relevant postsecondary programs and non-productive programs are phased out.

Virginia has taken initial steps to progress toward its goals through the establishment of six regional consortia for continuing higher education. The purpose of these consortia is to "promote cooperation and coordination of effort among the state supported and private institutions of higher education engaged in continuing education."[40] The state has

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40 "The Virginia Plan for Higher Education." State Council of Higher Education. Richmond, Virginia. January. 1974 (p. 58).

emphasized continuing education as part of the standard postsecondary curriculum because the number of 18 to 24 year old students is declining, and higher education will become increasingly more available and appropriate for citizens of all ages.

The coordinating council exercises an advisory capacity over the state's five universities, ten state colleges and 36 two year campuses. Institutional budget requests are submitted to the Council and to the state budget office, and each of these offices submits revised recommendations to the General Assembly. Appropriations are based on institutional requests rather than a budget formula, and institutions set their own tuition levels. Over 96% of the higher education appropriation of $277.0 million was allocated to public postsecondary institutions in 1975. This is the highest proportion of a higher education budget allocated to public institutions among the comparable states.

The 31 independent institutions in Virginia do not receive direct subsidies from the state, although their students are eligible for state loans of up to $400 a year. In its Master Plan, the Council proposed the writing of a Constitutional Amendment which would allow the awarding of student aid grants to independent college students and contracts for special independent institution services.

The student aid allocation of $3.8 million in 1975-76 was 1.4% of the higher education budget. This included $1.3 million in scholarship grants and $2.5 million in Tuition Assistance Loans to independent college students. The number of award winners have increased this year, but the average award is less than $250, which is only 60% of the lowest public sector tuition.

Virginia had the lowest per capita income among the comparable states, but the greatest higher education appropriation in relation to total tax revenue.

New Jersey

Postsecondary education in New Jersey was governed by the State Board of Education until 1966, when the Higher Education Act was passed in response to the recommendations of a Citizens Study Committee (the Goheen Committee).[41] The group was organized by the Governor to study a perceived crisis in the higher education system at that time: the system was considered far too inadequate for the expected increases in college enrollments over the next decade. The Goheen Committee recommended expansion in postsecondary facilities and programs. Subsequent legislation mandated the construction of two additional state colleges and a two year college in each county which needed one.

The Higher Education Act of 1966 authorized the establishment of the Board of Higher Education and the Department of Higher Education, which currently serve as regulatory agencies over the state's major public university, technological institute, eight state colleges and 18 county colleges. (The counties share costs and governance of the two year campuses.)

The Board of Higher Education developed a Master Plan in January, 1970. The state's goals for postsecondary education, as stated in the plan, are to provide opportunity and financial access for all citizens, to maintain institutional diversity and flexibility, to support an integrated system of public and private institutions and to achieve excellence through research and the attainment of knowledge. Phase II of the Master Plan, which was published in 1974, emphasized the priority attached to open access and

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41 Citizens Committee for Higher Education in New Jersey. "A Call to Action." Princeton, New Jersey, 1965.

related it to the state's desire to increase enrollment of the "disadvantaged" and to decrease the number of residents enrolling in postsecondary institutions in other states.

New Jersey currently allocates most of its higher education appropriation to the public institutions: 86.2% of all public monies went directly to public institutions in 1974 and 1975 (See Table 12). This allocation is one of the lowest among the comparable states, primarily because New Jersey's student aid appropriation is higher than most other states'. The multicampus Rutgers University receives 30% of the higher education budget.

The state has been commended by the Carnegie Commission for its leadership in supporting independent institutions.[42] Per student subsidies are granted for New Jersey residents enrolled in independent institutions. Contracts are awarded for graduate and professional programs which are offered by the independent institutions and which the state believes are necessary. Most students (75%) in New Jersey's independent institutions are in-state residents; the total state institutional subsidy to these colleges amounts to $6.0 million.

The state student aid program also has several components, including a competitive scholarship, a grant program for independent college students, an Educational Opportunity Fund for disadvantaged students and special loan funds for some graduate students. In 1975 and 1976, 10.9% of the budget was allocated for these programs. Of this $29.0 million, 38% was distributed to the Educational Opportunity Fund, 16% to independent college students and 33% to state scholarships and incentive grants.[43]

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[42] Carnegie Commission. The States and Higher Education. Op. Cit.

[43] Program delineation is derived from M. M. Chambers. Op Cit.

Despite these advances, the Board of Higher Education foresaw a potential crisis in the system due to expected decreases in the college-aged population, and other "critical factors affecting postsecondary education."[44] The Board established a special Commission in late 1974 to study open access, institutional flexibility and stability,and financial equity. The Commission was asked to make recommendations for modifying the financing structure based on its consideration of these issues.

The Commission identified three basic weaknesses in the system, which could contribute to an inability to adapt to the future: (1) institutional and student financing inequities; (2) limitations on student choice due to these inequities and (3) a threat to the diversity of the system as a result of inequities and limited student choice.

Several recommendations were proposed to alleviate these weaknesses.[45] The Commission's recommendations will be presented to the Board of Higher Education and the State Legislature in early 1977.

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[44] Board of Higher Education. "A Charge to the Commission on Financing Postsecondary Education." Trenton, New Jersey, August, 1974.

[45] Booher Commission. "Financing in an Era of Uncertainty." Princeton, New Jersey, December, 1976.

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Table A

Raw Data for 25 Variables, by State [a]

State	Variables							
	1	2	3	4	5	6	7	8
Alabama	52.30	20.70	26.20	13.67	12.40	5.70	3444.00	175.00
Alaska	0.0	4.30	3.00	11.58	19.50	9.50	302.00	242.00
Arizona	74.50	11.50	3.60	13.23	16.40	4.10	1772.00	228.00
Arkansas	50.90	22.80	16.30	13.80	10.80	4.90	1923.00	187.00
California	91.70	8.40	7.00	14.09	17.40	9.60	14993.00	283.00
Colorado	71.70	9.10	5.60	14.19	16.00	10.70	2207.00	252.00
Connecticut	82.80	5.30	6.60	14.07	17.50	9.50	3032.00	281.00
Delaware	70.40	8.20	14.30	14.57	16.30	10.11	546.00	293.00
D.C.	100.00	12.70	71.10	9.10	19.10	14.35	756.00	324.00
Florida	68.60	14.70	15.30	10.85	13.60	7.80	6769.00	245.00
Georgia	49.70	11.70	21.90	12.85	12.00	6.20	4560.00	204.00
Hawaii	81.90	7.00	1.00	15.96	15.40	9.60	770.00	214.00
Idaho	57.00	10.90	0.30	17.87	13.50	7.20	713.00	220.00
Illinois	80.10	7.70	12.80	13.60	14.20	7.30	11114.00	269.00
Indiana	61.90	7.40	6.90	14.29	12.30	6.30	5194.00	245.00
Iowa	55.60	5.90	1.10	17.56	12.70	6.40	2825.00	231.00
Kansas	62.50	9.70	4.80	16.00	14.30	8.20	2249.00	240.00
Kentucky	46.00	19.10	7.10	13.23	11.80	4.90	3219.00	194.00
Louisiana	54.50	21.50	29.60	13.71	13.90	6.70	3043.00	250.00
Maine	21.70	10.30	0.30	17.21	12.30	5.50	994.00	209.00
Maryland	84.30	7.70	17.80	13.50	16.90	9.30	3922.00	245.00
Massachusetts	84.70	6.20	5.10	14.27	17.40	8.80	5869.00	242.00
Michigan	78.70	7.30	11.20	15.03	14.20	6.80	8875.00	252.00
Minnesota	56.90	6.10	0.90	17.03	15.70	7.50	3805.00	236.00
Mississippi	37.70	28.90	36.80	13.84	12.20	5.60	2217.00	161.00
Missouri	69.10	11.20	10.30	13.58	13.60	6.20	4877.00	245.00
Montana	58.90	10.40	0.30	16.18	14.30	7.50	664.00	238.00
Nebraska	62.80	10.10	2.70	16.30	12.90	6.80	1484.00	247.00
Nevada	80.70	7.00	5.70	11.78	14.20	8.30	489.00	444.00
New Hampshire	57.50	6.70	0.30	15.06	14.90	7.10	736.00	271.00
New Jersey	86.90	8.10	10.70	13.92	16.10	8.40	7168.00	257.00
New Mexico	51.10	10.50	1.90	16.19	19.00	9.80	1010.00	245.00
New York	84.10	8.50	11.90	12.77	16.70	8.90	18191.00	247.00
North Carolina	57.30	18.30	22.20	13.77	11.60	6.30	5082.00	194.00
North Dakota	11.90	12.40	0.40	19.98	13.30	5.10	616.00	218.00
Ohio	77.70	7.10	9.10	15.17	13.80	7.00	10652.00	240.00
Oklahoma	56.10	15.00	6.70	14.50	14.10	7.90	2559.00	245.00
Oregon	61.20	8.60	1.30	16.23	14.90	8.10	2091.00	252.00
Pennsylvania	79.40	7.90	8.60	15.61	13.80	6.40	11794.00	223.00
Rhode Island	84.70	8.50	2.70	13.31	13.80	6.60	950.00	230.00
South Carolina	54.30	19.00	30.50	12.79	11.50	6.90	2591.00	178.00
South Dakota	34.30	14.80	0.20	16.85	12.70	5.70	666.00	208.00
Tennessee	48.90	16.20	15.60	13.18	12.30	5.50	3924.00	194.00
Texas	73.10	14.00	12.50	12.91	14.40	8.00	11197.00	254.00
Utah	77.10	4.10	0.60	17.75	17.20	10.20	1059.00	200.00
Vermont	0.0	4.10	0.20	17.52	15.90	10.30	445.00	238.00
Virginia	61.10	17.30	18.50	13.44	14.00	6.40	4648.00	206.00
Washington	80.60	7.00	2.10	15.61	16.70	9.30	3409.00	254.00
West Virginia	31.30	14.00	3.40	15.45	12.10	5.20	1744.00	185.00
Wisconsin	57.10	7.40	2.90	17.71	13.70	6.70	4416.00	226.00
Wyoming	0.0	4.30	0.80	16.76	15.20	6.70	332.00	353.00

[a] Sources: Halstead, K. Statewide Planning in Higher Education. Washington, D.C.: DHEW, 1974 and U.S. Census Data, 1970.

Table A, continued

Raw Data for 25 Variables, by State

State	Variables 9	10	11	12	13	14	15	16	17
Alabama	[illegible]	[illegible]	3.70	57.00	5.40	11.83	22.00	838.00	14.30
Alaska	100.00	[illegible]	14.20	57.70	33.60	13.83	0.0	863.00	4.00
Arizona	83.74	[illegible]	4.90	57.40	30.10	13.83	32.10	788.00	10.00
Arkansas	[illegible]	[illegible]	4.40	57.40	7.70	13.56	4.20	634.00	15.10
California	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13.63	62.70	1104.00	6.90
Colorado	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Connecticut	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Delaware	100.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
D.C.	100.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Florida	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Georgia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hawaii	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Idaho	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Illinois	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Indiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Iowa	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kansas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kentucky	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Maine	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Maryland	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Massachusetts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Michigan	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Minnesota	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Missouri	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Montana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nebraska	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nevada	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Hampshire	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Jersey	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Mexico	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New York	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Carolina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Dakota	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ohio	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oklahoma	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oregon	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pennsylvania	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rhode Island	100.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
South Carolina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
South Dakota	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tennessee	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Texas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Utah	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Vermont	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Virginia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Washington	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
West Virginia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wisconsin	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wyoming	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table A, continued

Raw Data for 25 Variables, by State

State	Variables							
	18	19	20	21	22	23	24	25
Alabama	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Alaska	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Arizona	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Arkansas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
California	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Colorado	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Connecticut	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Delaware	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
D.C.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Florida	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Georgia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hawaii	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Idaho	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Illinois	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Indiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Iowa	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kansas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Kentucky	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Louisiana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Maine	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Maryland	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Massachusetts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Michigan	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Minnesota	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mississippi	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Missouri	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Montana	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nebraska	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nevada	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Hampshire	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Jersey	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Mexico	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New York	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Carolina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
North Dakota	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ohio	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oklahoma	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Oregon	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pennsylvania	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rhode Island	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
South Carolina	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
South Dakota	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tennessee	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Texas	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Utah	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Vermont	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Virginia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Washington	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
West Virginia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wisconsin	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wyoming	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Part II

THE COMPARABLE STATES: TABULAR PRESENTATION OF DATA

The tables in this section display information pertinent to an understanding of governance, financing and program policies in the comparable states.[9] The information is presented here in tabular form to give the reader a cohesive picture of the policies and programs.

Table 7

Postsecondary governance and planning patterns are presented in Table 7. The type of statewide governance agency, the state's Master Plan (if any), Study Commissions and postsecondary goals are outlined for each comparable state.

Six of the states, including New Jersey, have regulatory coordinating bodies. All of the states except Massachusetts have Master Plans which have been developed since 1968. Only two states have not established Study Commissions to investigate special issues in higher education. All of the states stress "access," except Michigan, in which access no longer appears to be a problem. The two state systems which are governed by advisory coordinating boards, Maryland and Michigan, stress institutional autonomy and efficient resource utilization.

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[9] In all cases, information was used for the year in which the most complete data was available for all of the comparable states. Sources for all data are listed below each table.

Table 8

In Table 8, the budget submission process and type of state subsidies to public and independent institutions and to students through grant aid are explained. Tuition policy and 1975-76 tuition levels for all public sectors are also shown.

The budget submission process varies considerably, in terms of which unit receives institutional budget requests. In most cases, the state legislature passes a final budget, but only after the request has been reviewed and revised by the Governor, the state budget office and/or the board or council of higher education. Once the appropriation has been approved, monies are often allocated to public institutions without the use of a budget formula, although some states do base allocations on per student enrollments in the public sector.

Most of the comparable states do allocate a small percentage of the budget to independent institutions, primarily through contracted services programs. A few states give direct subsidies in support of independent medical and dental schools.

Student aid awards range from $100 a year to $1,500 a year in the nine states. In five states, grants are based on some assessment of student merit and need. Grants are based solely on need in four states.

Tuition and fees in public institutions range from $265 to $570 per year in two year colleges, $495 to $800 in four year state colleges and $495 to $944 in the state universities. Most states do not have specific formulae for setting tuition levels. In Michigan and Virginia, the institutions set their own tuitions; in Ohio, the state has set a maximum tuition level and institutions are free to set tuitions up to that level. This is also true of the county colleges in New Jersey.

Table 9

Student aid programs in each state are described in Table 9. The program or agency administering the program is identified, the award policy for each type of assistance program is described, and the grant portability policy in each state is cited.[10] Scholarships awarded in Maryland, Michigan and Virginia, and grants awarded in Ohio, must be used in-state. The other comparable states allow some portability of grants under various conditions.

A separate agency has been established in most of the comparable states to administer guaranteed student loan programs. Scholarship and grant programs are usually administered by the central office staff of the higher education coordinating agency.

Table 10

Enrollment distributions of all students and numbers and percentages of student aid recipients are shown in Table 10. The U.S. mean for each of these figures is also identified.

The average aid award in 1975-76 ranged from $432 to $790 per student per year, but the number of aid recipients ranged from 1,602 students to 112,743 students. The U.S. total of aid recipients was 813,040; the nine comparable states enroll nearly one-third of all state grant recipients in the country.

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[10] Portability is the ability to take a State scholarship or grant to a postsecondary institution in another state.

Table 11

The states are ranked in Table 11 on measures of income per capita, the higher education appropriation per capita, per $1,000 of personal income, and as a percentage of state and local tax revenue. The amount of that appropriation distributed per full-time equivalent student is also shown.

Table 12

Finally, the 1975-76 distribution of the higher education appropriation to institutions, students and other recipient categories is presented for each state in Table 12.

The absolute dollar appropriation varied from $47.8 million in Rhode Island to $622.6 million in Pennsylvania. Rhode Island has the smallest student population and lowest number of public institutions. Pennsylvania has the second highest number of students (Michigan has the greatest, with 452,600 students) and the second highest number of public units (Ohio has eight more campuses).